15. Queries about the Contract Data

15.1 The Employer will clarify queries on the Contract Data.

16. Contractor to construct the Works

16.1 The Contractor shall construct the Works in accordance with the Specification and Drawings.

17. The Works to be completed by the Intended Completion Date

17.1 The Contractor may commence execution of the Works on the Start Date and shall carry out the Works in accordance with the program submitted by the Contractor, as updated with the approval of the Employer, and complete them by the Intended Completion Date.

18. Approval by the Employer:

18.1 The Contractor shall submit Specification and drawings showing the proposed Temporary Works to the Employer, who is to approve them if they comply with the Specifications and Drawings.

18.2 The Contractor shall be responsible for the design of Temporary Works

18.3 The Employer's approval shall not alter the Contractor's responsibility for design of the Temporary Works.

18.4 The Contractor shall obtain approval of third parties to the design of third parties to the design of the temporary Works where required.

18.5 All Drawings prepared by the Contractor for the execution of the temporary or permanent Works, are subject to prior approval by the Employer before their use.

19. Safety

19.1 The Contractor shall be responsible for the safety of all activities on the Site.

20. Discoveries

20..1 Anything of historical or other interest or of significant value unexpectedly discovered on the Site is the property of the Employer. The Contractor is to notify the Employer of such discoveries and carry out the Employer's instructions for dealing with them.

21. Possession of the Site

21.1 The Employer shall give possession of all parts of the Site to the Contractor. If possession of a part is not given by the date stated in the Contract Data the Employer is deemed to have delayed the start of the relevant activities and this will be Compensation Event.

22. Access to the Site

22.1 The Contractor shall allow the Employer and any person authorized by the Employer access to the Site, to any place where work in connection with the Contract is being carried out or is intended to be carried out and to any place where materials or plant are being manufactured / fabricated / assembled for the works.

23. Instructions

23.1 The Contractor shall carry out all instructions of the Employer which comply with the applicable laws where the Site is located.

24. Procedure for resolution of Disputes:

24.1 If the Contractor is not satisfied with the decision taken by the Employer, the dispute shall be referred by either party to Arbitration within 30 days of the notification of the Employer's decision.

24.2 If neither party refers the dispute to Arbitration within the above 30 days, the Employer's decision will be final and binding.

24.3 The Arbitration shall be conducted in accordance with the arbitration procedure stated in the Special Conditions of Contract.

B. Time Control

25. Program

25.1 Within the time stated in the Contract Data the Contractor shall submit to the Employer for approval a Program showing the general methods, arrangements, order, and timing for all the activities in the Works.

25.2 The Employer's approval of the Program shall not alter the Contractor's obligations. The Contractor may revise the Program and submit it to the Employer again at any time. A revised Program is to show the effect of Variations and Compensation Events.

26. Extension of the Intended Completion Date

26.1 The Employer shall extend the Intended Completion Date if a Compensation Event occurs or a Variation is issued which makes it impossible for Completion to be achieved by the Intended Completion Date.

26.2 The Employer shall decide whether and by how much to extend the Intended Completion Date within 21 days of the Contractor asking the Employer for a decision upon the effect of a Compensation Event or Variation and submitting full supporting information.

27. Delays ordered by the Employer

27.1 The Employer may instruct the Contractor to delay the start or progress of any activity within the Works.

28. Management meetings

28.1 The Employer may require the Contractor to attend a management meeting. The business of a management meeting shall be to review the progress achieved and the plans for remaining work.

28.2 The responsibility of the parties for actions to be taken is to be decided by the Employer either at the management meeting or after the management meeting and stated in writing to be distributed to all who attended the meeting.

C. Quality Control

29. Identifying defects

29.1 The Employer shall check the Contractor's work and notify the Contractor of any Defects that are found. Such checking shall not affect the Contractor's responsibilities. The Employer may instruct the Contractor to search for a Defect and to uncover and test any work that the Employer considers may have a Defect

30. Tests

30.1 If the Employer instructs the Contractor to carry out a test not specified in the Specification to check whether any work has a Defect and the test shows that it does, the Contractor shall pay for the test and any samples. If there is no Defect the test shall be a Compensation Event.

31. Correction of defects

31.1 The Employer shall give notice to the Contractor of any Defects before the end of the Defects Liability Period, which begins at Completion and is defined in the Contract Data. The Defects Liability Period shall be extended for as long as Defects remain to be corrected.

31.2 Every time notice of a Defect is given, the Contractor shall correct the notified Defect within the length of time specified by the Employer's notice.

32. Uncorrected defects

32.1 If the Contractor has not corrected a Defect within the time specified in the Employer's notice, the Employer will assess the cost of having the Defect corrected, and the Contractor will pay this amount.

D. Cost Control

33. Bill of Quantities (BOQ)

33.1 The BOQ shall contain items for the construction, installation, testing, and commissioning work to be done by the Contractor.

33.2 The BOQ is used to calculate the Contract Price. The Contractor is paid for the quantity of the work done at the rate in the BOQ for each item

34. Variations

34.1 The Employer shall have power to order the Contractor to do any or all of the following as considered necessary or advisable during the progress of the work by him

(a) Increase or decrease of any item of work included in the Bill of Quantities (BOQ);
(b) Omit any item of work;
(c) Change the character or quality or kind of any item of work;
(d) Change the levels, lines, positions and dimensions of any part of the work;
(e) Execute additional items of work of any kind necessary for the completion of the works; and
(f) Change in any specified sequence, methods or timing of construction of any part of the work.

34.2 The Contractor shall be bound to carry out the work in accordance with any instructions in this connection, which may be given to him in writing by the Employer and such alteration shall not vitiate or invalidate the contract.

34.3 Variations shall not be made by the Contractor without an order in writing by the Employer, provided that no order in writing shall be required for increase or decrease in the quantity of an item appearing in the BOQ so long as the work executed conforms to the approved drawings.

34.4 The Contractor shall promptly request in writing to the Employer to confirm verbal orders and the officer issuing oral instructions shall confirm it in writing within 30 days, failing which the work shall be carried out as though there is no variation. In case variation is approved it shall be accompanied by BOQ, failing which the contractor shall be responsible for deviation if any. Further, approval of Govt. / BBMP has to be obtained for the variation exceeding 5%.

35. Payments for Variations

35.1 Payment for increase in the quantities of an item in the BOQ up to 25% of that provided in the Bill of Quantities shall be made at the rates quoted by the Contractor.

35.2 For quantities in excess of 125% of the tendered quantity of an item as given in the BOQ, the Contractor shall be paid at the rate entered in or derived from in the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract.

35.3 If there is no rate for the additional, substituted or altered item of the work in the BOQ, efforts would be made to derive the rates from those given in the BOQ or the Schedule of Rates (applicable for the area of the work and current at the time of award of contract) and if found feasible the payment would be made at the derived rate for the item plus or minus the overall percentage of the original tendered rates over the current Schedule of Rates prevalent at the time of award of contract

35.4 If the rates for additional, substituted or altered item of work cannot be determined either as at 35.1 or 35.2 or 35.3 above, the Contractor shall be requested to submit his quotation for the items supported by analysis of the rate or rates claimed, within 7 days.

35.5 If the Contractor's quotation is determined unreasonable, the Employer may order the Variation and make a change to the Contract Price which shall be based on Employer's own forecast of the effects of the Variation on the Contractor's costs.

35.6 If the Employer decides that the urgency of varying the work would prevent a quotation being given and considered without delaying the work, no quotation shall be given and the Variation shall be treated as a Compensation Event.

35.7 Under no circumstances the Contractor shall suspend the work on the plea of non-settlement of rates for items falling under this Clause.

36. Submission of bills for payment

36.1 The Contractor shall submit to the Employer monthly bills of the value of the work completed less the cumulative amount paid previously.

36.2 The Employer shall check the Contractor's bill and determine the value of the work executed which shall comprise of (i) value of the quantities of the items in the BOQ completed and (ii) valuation of Variations and Compensation Events.

36.3 The Employer may exclude any item paid in a previous bill or reduce the proportion of any item previously paid in the light of later information.

37. Payments

37.1 Payments shall be adjusted for deductions for advance payments other than recoveries in terms of contract and taxes, at source, as applicable under the law. The Employer shall pay the Contractor the within 60 days of submission of bill. The contractor shall be liable to pay liquidated damages for shortfall in progress. For progress beyond the agreed programme payment is subject to availability of the grants.

37.2 Items of the Works for which no rate or price has been entered in will not be paid for by the Employer and shall be deemed covered by other rates and prices in the Contract.

38. Compensation events

38.1 The following are Compensation events unless they are caused by the Contractor:

(a) The Employer does not give access to a part of the Site by the Site Possession Date stated in the Contract Data.

(b) The Employer orders a delay or does not issue drawings, specifications or instructions required for execution of works on time.

(c) The Employer instructs the Contractor to uncover or to carry out additional tests upon work which is then found to have no Defects.

(d) The Employer gives an instruction for dealing with an unforeseen condition, caused by the Employer, or additional work required for safety or other reasons.

(e) The effect on the Contractor of any of the Employer's Risks.

(f) The Employer unreasonably delays issuing a Certificate of Completion.

(g) Other Compensation Events listed in the Contract Data or mentioned in the Contract.

38.2 If a Compensation Event would cause additional cost or would prevent the work being completed before the Intended Completion Date, the Contract Price shall be increased and/or the Intended Completion Date is extended. The Employer shall decide whether and by how much the Contract Price shall be increased and whether and by how much the Intended Completion Date shall be extended.

38.3 As soon as information demonstrating the effect of each Compensation event upon the Contractor's forecast cost has been provided by the Contractor, it is to be assessed by the Employer and the Contract Price shall be adjusted accordingly. If the Contractor's forecast is deemed unreasonable, the Employer shall adjust the Contract Price based on Employer's own forecast. The Employer will assume that the Contractor will react competently and promptly to the event.

38.4 The Contractor shall not be entitled to compensation to the extent that the Employer's interests are adversely affected by the Contractor not having given early warning or not having cooperated with the Employer.

39. Tax

39.1 The rates quoted by the Contractor shall be **exclusive of GST or as specified in the notification**. The Contractor will have to pay for the performance of this Contract. The Employer will perform such duties in regard to the deduction of such taxes at source as per applicable law.

40. Price Adjustment

Conditions mentioned in G.O. No. FD 3 PCL 2008, Bangalore, Dated: 21.11.2008 & G.O. No. 791EXP-12/2015 Bengaluru Dated 26.02.2016

40.1 Contract price shall be adjusted for increase or decrease in rates and prices of labour, materials, fuels and lubricants in accordance with the following principles and procedures and as per formulae given in the Contract Data.[10]

(a) The price Adjustment shall apply for the work done from the date of commencement up to the end of original period of completion or extensions granted by the Employer and shall not apply to work carried out beyond the stipulated period of completion for reasons attributable to the Contractor;

(b) Price Adjustment shall be admissible from the date of opening of tenders (original or extended)

(c) The price adjustment shall be determined during each quarter from the formulae given in Contract Data.

(d) Following expressions and meanings are assigned to the work done during the quarter:

R = Total value of work done during the quarter. It will **exclude** value for works executed under variations for which price adjustment (if any) will be worked out separately based on the terms mutually agreed.

40.2 To the extent that full compensation for any rise or fall in costs to the contractor is not covered by the provisions of this or other Clauses in the Contract, the unit rates included in the contract shall be deemed to include amounts to cover the contingency of such other rise or fall in costs.

[10] Refer GOK Order No.FD 59 Pro.Cell 2004, Bangalore Dated 26th November 2004

41. Liquidated damages

41.1 The Contractor shall pay liquidated damages to the Employer at the rate per day stated in the Contract Data for each day that the Completion Date is later than the Intended Completion Date (for the whole of the works or the milestone as stated in the Contract Data). The total amount of liquidated damages shall not exceed the amount defined in the Contract Data. The Employer may deduct liquidated damages from payments due to the Contractor. Payment of liquidated damages does not affect the Contractor's liabilities.

41.2 If the Intended Completion Date is extended after liquidated damages have been paid, the Employer shall correct any overpayment of liquidated damages by the Contractor by adjusting the next payment of bill.

42. Advance Payments:

42.1 The Employer shall make payment to the Contractor of the amounts stated in the Contract Data by the date stated in the Contract Data, against provision by the Contractor of an unconditional bank guarantee in a form acceptable to the Employer issued by a Nationalized/Scheduled Bank in amounts equal to the advance payment. The guarantee shall remain effective until the advance payment has been repaid, but the amount of the guarantee shall be progressively reduced by the amounts repaid by the Contractor. Interest will not be charged on the advance payment.

42.2 The Contractor is to use the advance payment only to pay for Mobilization expenses required specifically for execution of the Works. The Contractor shall demonstrate that advance payment has been used in this way by supplying copies of invoices or other documents to the Employer.

42.3 The advance payment shall be repaid by deducting proportionate amounts from payments otherwise due to the Contractor, following the schedule of completed percentages of the Works on a payment basis. No account shall be taken of the advance payment or its repayment in assessing valuation of the work done, variations, price adjustments, compensation events or liquidated damages.

43. Securities:

43.1 The Security deposit (including additional security for unbalanced tenders) shall be provided to the Employer no later than the date specified in the Letter of Acceptance and shall be issued in an amount and form and type of instrument acceptable to the Employer. The Security deposit shall be valid until a date 30 days from the date of expiry of Defects Liability Period and the additional security for unbalanced tenders shall be valid until a date 30 days from the date of issue of the certificate of completion.

44. Cost of Repairs:

44.1 Loss or damage to the Works or Materials to be incorporated in the Works between the Start Date and the end of the Defects Correction periods shall be remedied by the Contractor at the Contractor's cost if the loss or damage arises from the Contractor's acts or omissions.

E. Finishing the Contract

45. Completion

45.1 The Contractor shall request the Employer to issue a Certificate of Completion of the Works and the Employer will do so upon deciding that the Work is completed.

46. Taking over

46.1 The Employer shall take over the Site and the Works within seven days of issuing a certificate of Completion.

47. Final account

47.1 The Contractor shall supply to the Employer a detailed account of the total amount that the Contractor considers payable under the Contract before the end of the Defects Liability Period. The Employer shall issue a Defect Liability Certificate and certify any final payment that is due to the Contractor within 90 days of receiving the Contractor's account if it is correct and complete. If it is not, the Employer shall issue within 90 days a schedule that states the scope of the corrections or additions that are necessary. If the Final Account is still unsatisfactory after it has been resubmitted, the Employer shall decide on the amount payable to the Contractor and make payment within 60 days of receiving the Contractor's revised account.

48. As built drawings and /or Operating and Maintenance Manuals

48.1 If -as built□(*Completion drawings*) Drawings and/or operating and maintenance manuals are required, the Contractor shall supply them by the dates stated in the Contract Data.

48.2 If the Contractor does not supply the Drawings by the dates stated in the Contract Data, or they do not receive the Employer's approval, the Employer shall withhold the amount stated in the Contract Data from payments due to the Contractor.

49. Termination

49.1 The Employer may terminate the Contract if the other party causes a fundamental breach of the Contract.

49.2 Fundamental breaches of Contract include, but shall not be limited to the following:

(a) The Contractor stops work for 45 days when no stoppage of work is shown on the current Program and the stoppage has not been authorized by the Employer;

(b) Deleted.

(c) The Contractor becomes bankrupt or goes into liquidation other than for a reconstruction or amalgamation;

(d) Deleted.

(e) the Employer gives Notice that failure to correct a particular Defect is a fundamental breach of Contract and the Contractor fails to correct it within a reasonable period of time determined by the Employer;

(f) the Contractor does not maintain a security which is required;

(g) the Contractor has delayed the completion of works by the number of days for which the maximum amount of liquidated damages can be paid as defined in the Contract data; and

(h) if the Contractor, in the judgment of the Employer has engaged in corrupt or fraudulent practices in competing for or in the executing the Contract.

For the purpose of this paragraph : -corrupt practice□ means the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in the procurement process or in contract execution. -Fraudulent practice□ means a misrepresentation of facts in order to influence a procurement process or the execution of a contract to the detriment of the Borrower, and includes collusive practice among Tenderers (prior to or after Tender submission) designed to establish Tender prices at artificial non-competitive levels and to deprive the Borrower of the benefits of free and open competition.□

49.3 When either party to the Contract gives notice of a breach of contract to the Employer for a cause other than those listed under Sub Clause 49.2 above, the Employer shall decide whether the breach is fundamental or not.

49.4 Notwithstanding the above, the Employer may terminate the Contract for convenience.

49.5 If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.

50. Payment upon Termination

50.1 If the Contract is terminated because of a fundamental breach of Contract by the Contractor, the Employer shall prepare bill for the value of the work done less advance payments received up to the date of the bill, less other recoveries due in terms of the contract, less taxes due to be deducted at source as per applicable law and less the percentage to apply to the work not completed as indicated in the Contract Data. Additional Liquidated Damages shall not apply. If the total amount due to the Employer exceeds any payment due to the Contractor the difference shall be a debt payable to the Employer.

50.2 If the Contract is terminated at the Employer's convenience or because of a fundamental breach of Contract by the Employer, the Employer shall prepare bill for the value of the work done, the reasonable cost of removal of Equipment, repatriation of the Contractor's personnel employed solely on the Works, and the Contractor's costs of protecting and securing the Works and less advance payments received up to the date of the certificate, less other recoveries due in terms of the contract, and less taxes due to be deducted at source as per applicable law and make payment accordingly.

51. Property

51.1 All materials on the Site, Plant, Equipment, Temporary Works and Works are deemed to be the property of the Employer, if the Contract is terminated because of a Contractor's default.

52. Release from performance

52.1 If the Contract is frustrated by any event entirely outside the control of either the Employer or the Contractor the Employer shall certify that the Contract has been frustrated. The Contractor shall make the Site safe and stop work as quickly as possible after receiving this certificate and shall be paid for all work carried out before receiving it and for any work carried out afterwards to which commitment was made

F. Special Conditions of Contract

1. Labour :

The Contractor shall, unless otherwise provided in the Contract, make his own arrangements for the engagement of all staff and labour, local or other, and for their payment, housing, feeding and transport.

The Contractor shall, if required by the Employer, deliver to the Employer a return in detail, in such form and at such intervals as the Employer may prescribe, showing the staff and the numbers of the several classes of labour from time to time employed by the Contractor on the Site and such other information as the Employer may require.

2. Compliance with labour regulations :

During continuance of the contract, the Contractor shall abide at all times by all existing labour enactments and rules made there under, regulations, notifications and bye laws of the State or Central Government or local authority and any other labour law (including rules), regulations, bye laws that may be passed or notification that may be issued under any labour law in future either by the State or the Central Government or the local authority. The Contractor shall keep the Employer indemnified in case any action is taken against the Employer by the competent authority on account of contravention of any of the provisions of any Act or rules made there under, regulations or notifications including amendments. If the Employer is caused to pay or reimburse, such amounts as may be necessary to cause or observe, or for non-observance of the provisions stipulated in the notifications/bye laws/Acts/Rules/regulations including amendments, if any, on the part of the Contractor, Employer shall have the right to deduct any money due to the Contractor including his amount of security deposit. The Employer shall also have right to recover from the Contractor any sum required or estimated to be required for making good the loss or damage suffered by the Employer.

The employees of the Contractor in no case shall be treated as the employees of the Employer at any point of time.

3. Protection of Environment:

The contractor shall take all reasonable steps to protect the environment on and off the Site and to avoid damage or nuisance to persons or to property of the public or others resulting from pollution, noise or other causes arising as a consequence of his methods of operation. During continuance of the contract, the contractor shall abide at all times by all existing enactments on environmental protection and rules made there under, regulations, notifications and bye-laws of the State or Central Government, or local authorities and any other law, bye-law, regulations that may be passed or notification that may be issued in this respect in future by the State or Central Government or the local authority.

4. Arbitration (Clause 24)

4.1 The procedure for arbitration shall be as follows:

(a) In case of dispute or difference arising between the Employer and the Contractor relating to any matter arising out of or connected with this agreement it shall be settled in accordance with the Arbitration and Conciliation Act 1996. The disputes or differences shall be referred to a Sole Arbitrator. The Sole Arbitrator shall be appointed by agreement between the parties; failing such agreement, by the Appointing Authority (any one of the Organizations as per list enclosed in Annexure)

(b) Arbitration proceedings shall be held at Bangalore in Karnataka state (to be filled in by the Employer before issue of the Tender Documents),

(c) The cost and expenses of arbitration proceedings will be paid as determined by the Arbitrator. However the expenses incurred by each party in connection with the preparation, presentation, etc., shall be borne by each party itself.

(d) Performance under the contract shall continue during the arbitration proceedings and payments due the Contractor by the Employer shall not be withheld, unless they are the subject matter of the arbitration proceedings.

OTHER CONDITIONS

1 General

The Contractor is advised to note that the following Other Conditions are part of the Contract and he will not have any right to claim at any time for delays or for expenditure incurred by him in fulfilling the following special conditions.

2. Scope of Works

a) Site clearance, demolition works, earthworks, temporary works, Traffic diversion, Barricading the construction site, and all ancillary works as shown on the Drawings and deemed necessary for the carrying out of temporary and permanent construction works;

b) Widening/re-cambering/raising/milling down and overlaying of existing carriageways, flexible/rigid pavement at at-grade road intersections and accesses to adjoining developments;

c) Trees cutting (if any) as indicated in the Drawings;

d) Excavation of trenches;

e) Construction of Utility ducts, Culvert as per the drawing.;

f) Construction of footpath, , kerbs, , and other road-related facilities;

g) Formation of embankments;

h) Supply and install new traffic signage, directional signage, street name signs and re-sitting of such existing signs and other road signs to be retained, inclusive of support and foundations by Manufacturer of Retro Reflective ASTM Type XI sheet or their Indian subsidiary;

i) Supply and installation of new Electric poles and light fittings as shown in the Drawings;

k) Temporary and permanent diversion and restoration of footpath, drains, roads and street furniture including the supply and painting of road/lane markings for all temporary and permanent carriageway in accordance with the Employer's requirements and to the satisfaction of the Engineer;

l) Re-sitting/reconstruction of existing fencing, posts, gates, footpaths, signages, boundary walls, guardrails, railings, parapet walls, bollards, and all others affected by the Works. The boundary wall/fencing affected shall be reconstructed to a standard equal to or better than the existing condition of the boundary wall/fencing, abutting the road reserve line and to its current exposed height with new foundation after raising of the road level to the proposed level;

m) All other works and services ancillary or related to the full completion of the Works in accordance with the Employer's requirements.

All the Contract Works shall be executed in full compliance with the Specifications of the Contract and all requirements and always to the satisfaction of the Employer.

The Contractor shall have to be inspected, tested and examined the site and surroundings and to have satisfied himself as to all the conditions, factors and risks which can be reasonably obtained or inferred from the inspections, tests and examinations that may influence or affect the progress and cost of Contract Works. In this connection to understand the local issues and the nature of the work, the Tenderer shall visit the site with the relevant department Engineer In charge and obtain the Certificate from the concerned Executive Engineer in charge and same should be uploaded for evaluation, otherwise the BBMP Bangalore reserves the right to accept/reject such tenders without assigning any reason.

The Contractor shall resolve local constraints and problems, liaise, seek, and obtain any consent, permit, license, approval, etc. from all Relevant Authorities including paying all fees, charges, levies, etc all at his own cost.

Clearing all debris and disposing to location approved by BBMP during progress of Contract works and before and after the dates of Completion.

3. Additional Work

Any additional works, instructed during the Contract Period and within the Contract Amount, will be paid as per Schedule of Quantity rates and it shall not be considered as a cause for the Contractor to claim for delay, incurred overhead, mobilization etc.

4. Defect Liability Period

The Contractor shall be responsible for replacing any defective work and rectifying any defects in this works and maintaining the same during the Defect Liability Period free of cost. For this purpose, the Contractor shall retain in charge Engineer at site who shall be always available as Bidders representative in dealing with employer during the Maintenance Period which shall run concurrently along with the defects liability period.

The Defect Liability Period shall be 12 months from the next day of issue of Completion Certificate/Completion of works in all respect as per Contract and recommendation of certified final bill by BBMP/PMC

5. Public Utilities

It is clearly understood that any damage occurring to the Works (completed or under execution) is the Contractors responsibility and no claims will be entertained by the Employer since the matter shall be covered by the relevant Insurances.

Any services affected by the Works must be temporarily supported by the Contractor who must also take all measures reasonably required by the various bodies to protect their services and property during the progress of the works.

The work of temporarily supporting and protecting the public utility services during execution of the Works shall be deemed to be part of the Contractor and no extra payment shall be made for the same.

Maintenance of the existing road shall be done by the contractor from the date of commencement of the Tender work till the completion of work at the cost of the agency without affecting the vehicle traffic.

6. Materials for work

Steel & Cement should be procured by primary producers only. The list of primary producers such as:

a) Cement: Ultratech, ACC, Gujarat Ambuja, J. K. Cement & Grasim (Birla Super).
b) Steel: Primary Sources namely: TISCO, SAIL, JSW, RINL.

The contractor shall ensure the project road is maintained in traffic worthy and motorable condition till completion and handing over of the project. In this regard, no extra payment will be paid by BBMP whatever the reason may be. The rate quoted by the agency shall be inclusive of expenditure to be made towards maintenance of the existing road during the entire construction period.

7. Credit of Salvage Values of Dismantled Materials

I. All salvage materials as listed in the following Schedule of Credit shall become the property of contractor (when the work is awarded on tender basis) and the materials can be removed from the site only after the recovery has been made from the contractor and after obtaining written instructions from EIC".

II. The materials enumerated below shall become the property of the contractor. These materials shall be allowed to be removed from site only after the credit amount is recovery from immediate interim/final bill (which ever submitted earlier).

III. The rate fixed by department is firm. The contractor shall have no claim whatsoever against the department if actual rate turns out to be different from the rates inserted by the department.

IV. The amount of credit in respect of items shown below shall be provisional and actual quantities shall be measured in MB against each item shall be considered for arriving total amount of credit.

V. Items if any obtained from demolition/dismantling but not listed below shall become the property of government and accordingly shall be handed over to BBMP without any extra payment.

Table showing the Schedule of Credit for Dismantled materials

Sl No /Item No	Items	Unit	Quantity in BOQ	Quantity of Re usage materials Can seggregated/ Unit	Current Material Rate as per SOR 18-19 Material	Salvage rate considered/ Unit	Amount(Rs)	Remarks
1	2	3	4	5	6	7	8=5x7	9
1	Telephone/Name board/signal post/Electrical poles	Nos	28	0		25	0	All Electri poles are very old and is active condition, entilre poles to be handed over to BBMP Electrical maintanance department.
2	Barbed wire fensing	m	260	390 kg/260m length	Rs55.08/kg	Rs20/kg	7800	Scrape material for re cycle
3	Wrought iron/steel	Tonne	1	1	37290/tonne	15000/tonne	15000	Scrape material for re cycle
4	Brick/Size Stones	Cum	281	112	666.67/cum	200/cum	22480	can be re used
5	RCC with Hysd steel	Cum	290	Hysed steel 5kg/cum=1450kg (1.45t) for 260cum	Rs41119/tonne issue rate for July 2020	Rs20560/tonne	29812	Scrape material =1.4x20560
	Total Salvage						75092	

7. Contractor's Other Obligations

a. In the case of the death of a Contractor after executing the agreement / commencement of the work, his legal heir, if an eligible registered Contractor and willing can execute and complete the work at the accepted tender rates irrespective of the cost of the work.

b. Mix Designs for Concrete and Asphalt work shall be got approved by Chief Engineer before commencement of Work.

c. The Contractor shall execute the work in minimum two shifts (Day & Night) for speedy completion of work and to minimize inconvenience to public.

d. The Contractor should have his own/got tested through NABL Accredited laboratory for Quality Control / Quality Assurance of the whole work.

e. Tenderer should have registered with EPF and ESI authorities; certification should be produced at the time of tendering OR else before entering in to the Agreement.

f. GST Shall be paid to the tendered amount separately.

g. The Hot Mix Plant (HMP) should be located in within 40 Km from Vidhana Soudha.

h. The ownership/Lease or Hire agreement for Hot Mix Plant (HMP) shall be inspected by the evaluator during the Technical Evaluation.

8. List of Minimum Key Personnel to be deployed by the Contractor at site

TABLE – 1

Sl. No	Position	Qualifications	Number of personnel
1	Project Manager	B.E. Civil + 15 Years minimum Construction experience (including 5 years as Project Manager on Road works)	One
2	Design Co ordinator/Transportation Engineer	B.E. Civil + 15 Years minimum Construction experience (including 3 years in road construction & design)	One
3	Construction Engineers	B.E. Civil + 5 Years minimum Construction experience (5 years on Road and Building construction)	Four
4	Material / Quality / Quantity Engineer	B.E Civil + 10 Years minimum experience (including 5 years on Road construction as Material / QC Engineer)	One
5	Planning Engineer	B.E Civil + 10 Years minimum experience in MS Project.	One
6	Safety Engineer	Diploma in Civil with 12 Years minimum experience.	One
7	Laboratory Technician	D.C.E. + 5 years minimum experience in Road , Building and bridge Construction in Q.C.	One

		Laboratory	
8	Electrical Technician	ITI Electrical + 10 years minimum experience	One
9	Auto CADD Draftsman	Diploma Civil + 5 years minimum experience	One
10	Accountant	B. Com + 10 years minimum experience in Infrastructure Projects	One
11	Store Keeper	Graduate in any discipline + 10 years minimum experience in Infrastructure Project.	One

Tree Cutting

The Contractor shall notify the Engineer prior to commencement and on completion of each trimming of trees, shrubs, turfing etc. in order that a joint site inspection can be made.

The maintenance of trees, plants and grass shall include watering, weeding, fertilising and cutting twice per month as specified and maintaining its growth in a tidy and satisfactory state. Fifty percent of the payment shall be reserved during maintenance periods and shall be released after the maintenance period is completed.

Post DLP, Maintenance clause is applicable for 36months as per BBMP's circular No.A/P.S.R/G-
5317/12-13 issued dated 24/09/2012. During this period, the Contractor shall maintain drains, landscaping and other works to the satisfaction of the Engineer and the employer.

Project Site Office

The Contractor shall provide and maintain adequately minimum requirement of furnished Site office as required for Site Control on the Quality of work, monitoring the Works. It shall have a minimum of 40 Sqm Area. The Site office shall be located as directed by the Employer or his approved Representative. It shall be provided with Amenities like Water Supply, Electric Supply, etc. The site office will have all Services, Furniture, Equipments, etc. Minimum of the following Items shall be provided in the site office,Table and Chairs,Computer systems, Almeraha for keeping site records. This office should also share with Project Management Consultants representative of Engineer In charge.

Royalties

The Employer shall deduct Royalties on materials used in the Works from the progress payments to the Contractor at the rates specified in the most recent "Amendment to the Karnataka Minor Minerals Concession Rules - 1969" as published by the Commerce and Industries Department (Mines) and as illustrated in Annexure-1, attached.

Site Order Book

The Contractor shall maintain an identical pair of Site Order Books (one marked original and the other marked duplicate), at the Site at all times during the execution of the Works for the use of the Engineer and the Contractor. All instructions issued by the Engineer to the

Contractor shall be recorded in both sets of the Site Order Book and shall be signed by the issuer and countersigned by the Contractor. After compliance with the instruction, the Contractor shall record the same in both sets of the Site Order Book duly signed and countersigned by the Engineer. Acceptance of any part of the work executed by the Contractor shall be subject to verification with respect to compliance of respective instructions of the Engineer through the Site Order Book. The Engineer shall retain the original copy of the Site Order Book, while the Contractor shall retain the duplicate one.

Quarry Materials

The Contractor shall be wholly responsible to identify the suitable sources for quarry materials required for the Works, such as earth, sand, stone, muram, etc., and to make his own arrangements for collection and transportation of the materials irrespective of the leads and lifts required. The quarry thus identified by the Contractor should have proper license from the Government of Karnataka. All materials supplied by the Contractor shall satisfy the requirements set forth in the Specifications and shall be subject to the approval of the Engineer. The Contractor shall take this into account while offering his rates and no claims whatsoever shall be entertained for extra costs on this account.

SECTION 6: CONTRACT DATA

Items marked "N/A" do not apply in this Contract.

	Clause Reference
The following documents are also part of the Contract:	[48]
• The Schedule of Operating and Maintenance Manuals	[25]
• The Methodology and Program of Construction	[14]
• Site Investigation Reports	
• The Schedule of Key and Critical Equipment to be deployed on the work as per agreed program of construction.	[25]

The Employer is : [1.1]

Name: The Commissioner
Address: BBMP, N.R. Square Bangalore-02
Name of authorized Representative: Executive Engineer
Road Infrastructure –Dasarahalli Division
No 207, Annex Building-3, 2nd Floor,
N.R. Square, Bengaluru - 560002

The name and identification number of the Contract is
Widening & Comprehensive Development of Singapura Garden Road from Abbigere Road (Precision Components Factory) to Shrinikethan Layout (BDA Layout) [1.1]

The Works consist of Widening & Comprehensive Development of Singapura Garden Road from Abbigere Road (Precision Components Factory) to Shrinikethan Layout (BDA Layout)

The start date shall be the 15th day from the date of issue of notice to proceed with the work. [1.1]

The Intended Completion Date for the whole of the Works is 12 (Twelve)months [12] with the following milestones [17, 26]

Milestone dates:

Physical works to be completed	Period from the date of issue of Notice to proceed with the work

Milestone Dates are shown in the Table below

The Site Possession Date is:[13] 15th day from the date of work order. [21]

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[12] At the time of preparation of the tender document give the period required for completion of whole work and the milestones. When the Agreement is drawn after award of contract the dates can be put in.
[13] At the time of preparation of the tender document give the period after the issue of work order, when the site would be made available to the contractor, for example „one week after the issue of work order

The Site is located at **Dasarahalli Zone** and is defined in drawings [1.1]

Mail stones	Work to be completed	Duration	Amount of Progress	Percentage of Progress
Mail stone -1	Site Clearance , dismantling of Buildins which are acquired for widenings, Manholes, Earth work up to Subgrade, 20% legth of Drain	6	9831464	22%
Mail stone-2	Drain about 50% length, GSB,WMM,Kerb, 7m wide Main carriage way with DBM,	3	20572986	46%
Mail stone-3	Balance 30% length of Drain, Foot Path, Service road,	2	13013671	29%
Mail stone-4	Completion of project in all respect	1	1511464	3%
Total		12	44929585	100%

The Defects Liability Period is 12 Months from the date of completion of Work/Project [31]

[13]

Insurance requirements are as under:

	Type of Cover	Minimum cover for Insurance[14]
(i)	Works and of Plant and materials	The sum stated in the Agreement plus 20%
(ii)	Loss or damage to equipment	Full replacement cost
(iii)	Loss or damage to property of Third Party	Full replacement cost
(iv)	Personal injury or death insurance (a) for Third Party[15]	
	(b) for Contractor's employees or labour	In accordance with the statutory requirements applicable to Karnataka

[40]

Price Adjustment Formula;[16]

R= Value of work as defined in Clause 40.1 of Conditions of Contract.

Adjustment for labour component:

(i) Price adjustment for increase or decrease in the cost due to labour shall be paid in accordance with the following formula:

$V_L = 0.85 \times P_L / 100 \times R \times (L_i - L_o) / L_o$ Where,

V_L = Increase or decrease in the cost of work during the quarter under consideration due to changes in rates for local labour;

L_o = The average consumer price index[17] for industrial workers for Bangalore Centre for the quarter preceding the date of opening of tenders as published by the Labour Bureau, Ministry of Labour, Government of India;

L_i = The average consumer price index for industrial workers for Bangalore Centre for the quarter under consideration as published by Labour Bureau, Ministry of Labour, Government of India

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[14] Employer to specify as per requirement. Exclusions if any should also be specified.
[15] Specify an appropriate figure. For normal works it could be Rs.20 lakhs to cover 4 persons @Rs.5 lakhs each.
[16] The Formula has some normal components. It should be changed if need be to suit the nature of the work.
[17] The Index numbers are available in the web site *http://labourbureau.nic.in/indtab.html*

P_L = Percentage of labour component of the work

Adjustment for Cement Component:

(ii) Price adjustment for increase or decrease in the cost of cement component procured by the contractor shall be paid in accordance with the following formula.

$$V_C = 0.85 \times P_C/100 \times R \times (C_i - C_o)/C_o \text{ , Where,}$$

V_C = Increase or decrease in the cost of the work during the quarter under consideration due to changes in the rates for cement;

C_o = The all India average wholesale price index [18]for cement (Ordinary Portland Cement) for the quarter preceding the date of opening of the tenders as published by the Office of Economic Advisor, Ministry of Commerce and Industry, Government of India , New Delhi;

C_i = The all India average wholesale price index for cement (Ordinary Portland Cement) for the quarter under consideration as published by the Office of Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_C = Percentage of cement component of the work

Note: For the application of this clause index of Ordinary Portland Cement[19] has been chosen to represent Cement Group

Adjustment for steel component:

(iii) Price adjustment for increase or decrease in the cost of steel procured by the contractor shall be paid in accordance with the following formula.

$$V_S = 0.85 \times P_S/100 \times R \times (S_i - S_o)/S_o \text{ where,}$$

V_S = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for steel;

S_o = The all India average wholesale price index for steel (M.S.Bars and rods) for the quarter preceding the date of opening of Bids as published by the Office of Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

S_i = The all India average wholesale price index for steel (M.S. Bars and Rods) for the quarter under consideration as published by the Office of Economic Advisor, Ministry of Commerce and Industry, New Delhi

P_S = Percentage of steel component of the work

Note: For the application of this clause, index of M.S.Bars and Rods[20] has been chosen to represent steel group.

Adjustment of Bitumen Component:

(iv) Price adjustment for increase or decrease in the cost of bitumen shall be paid in accordance with the following formula:

$$V_B = 0.85 \times P_B/100 \times R \times (B_i - B_o)/B_o \text{ , Where}$$

V_B = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rate for bitumen.

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[18] The index number are available in the web site *http://eaindustry.nic.in*

[19] This may be changed to any other type of cement depending on the nature of work.

[20] This may be changed depending on the major type of steel used depending on the nature of work

B_o = The official retail price of bitumen at the IOC /HPCL/BPL or any other depot at ..... [21]on the day 30 days prior to the date of opening of Bids.

B_i = The official retail price of bitumen at the IOC/HPCL/BPL or any other depot at ..... for the 15th day of the middle calendar month of the quarter under consideration.

P_B = Percentage of bitumen component of the work.

Adjustment of Fuel and Lubricant component:

(v) Price adjustment for increase or decrease in cost of Fuel and Lubricants shall be paid in accordance with the following formula:

$$V_F = 0.85 \times P_F/100 \times R \times (F_i - F_o)/ F_o, \text{ Where,}$$

V_F = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for Fuel and Lubricants.

F_o = The official retail price of High Speed Diesel (HSD) at the IOC/HPCL/BPL or other consumer pump at Bangalore on the day 30 days prior to the date of opening of Bids.

F_i = The official retail price of HSD at the IOC/HPCL/BPL or other consumer pump at Bangalore for the 15th day of the middle calendar month of the quarter under consideration.

P_F = Percentage of Fuel and Lubricant component of the work.

Note: For the application of this Clause the price of HSD[22] has been chosen to represent Fuel and Lubricant Group

Adjustment for Plant and Machinery Spares Component:

(vi) Price adjustment for increase or decrease in the cost of plant and machinery spares procured by the contractor shall be paid in accordance with the following formula:

$$V_P = 0.85 \times P_P/100 \times R \times (P_i - P_o)/P_o \text{ , Where}$$

V_P = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for plant and machinery spares.

P_o = The all India average wholesale price index for Heavy machinery and parts for the quarter preceding the date of opening of bids, as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_i = The all India average wholesale price index for Heavy machinery and parts for the quarter under consideration as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_B = Percentage of Plant and Machinery Spares component of the work.

Note: For the application of this Clause index of Heavy Machinery and Parts[23] has been chosen to represent the Plant and Machinery Spares Group.

Adjustment for Other materials.

(vii) Price adjustment for increase or decrease in the cost of other materials other than cement, steel, bitumen and Fuel and Lubricants[24], procured by the contractor shall be paid in accordance with the following formula:

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[21] Insert the nearest location of POL Depot

[22] This could be appropriately changed to any other item depending on the nature of work.

[23] This could be appropriately changed to any other item depending on the nature of the work.

$$V_M = 0.85 \times P_M/100 \times R \times (M_i - M_o)/M_o \text{ , Where}$$

V_M = Increase or decrease in the cost of work during the quarter under consideration due to changes in the rates for local materials other than cement, steel, bitumen and Fuel and Lubricants.

M_o = The all India average wholesale price index for all commodities for the quarter preceding the date of opening of bids, as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

M_i = The all India average wholesale price index for all commodities for the quarter under consideration as published by the Office of the Economic Advisor, Ministry of Commerce and Industry, Government of India, New Delhi

P_M = Percentage of other material component (Other than cement, steel, bitumen and Fuel and Lubricants) of the work.

The following percentages [25] will govern the price adjustment for the entire contract: [26]

1.	Labour – P_L	25.00 %
2.	Cement – P_C	14.00 %
3.	Steel – P_S	05.00 %
4.	Bitumen – P_B	18.00 %
5.	Fuel and Lubricants – P_F [27]	10.00 %
6	Plant and Machinery Spares – P_P [28]	5.00.%
7	Other materials – P_M	23.00.%
	TOTAL	**100.00 %** [29]

The liquidated damages for the whole of the works are **Rs. 78560, /-** (amount) per day[30] and that for the milestones are as under:

The maximum amount of liquidated damages for the whole of the works is Ten percent of final contract price. [41]

Mail stone	Penalty/day	Total Amount (Rs) of Penalty	Max Penalty 10% of Contract Value
M-1	44929.58	1797183.388	4492958.471
M-2	44929.58	1572535.465	
M-3	44929.58	1123239.618	
M-4			
Total		4492958.471	

The amounts of the advance payment are: [42]

[24] Add, delete or change depending on the nature of work.
[25] The percentages have to be approximately worked out on the estimates of cost and incorporated in the tender document before issue. It shall not be changed even if there is change of scope of work during execution.
[26] The components could be added or deleted or changed depending on the nature of the work.
[27] This could vary from 5% for normal works and 10% for highly mechanized operations in the work
[28] This could vary from 15% for normal works to 30% for highly mechanized operations in the work
[29] The total of the percentages for the various components of the works should be 100.
[30] The amount is usually computed on the basis of 0.1% of the contract price per day. The amount has to be specified as a round figure nearest to the hundred.

Nature of Advance	Amount (Rs.)	Conditions to be fulfilled
1.mobilization	5% of the Contract price	On submission of un-conditional Bank Guarantee. (to be drawn before end of 20% of Contract period)

(The advance payment will be paid to the Contractor no later than 30 days after fulfillment of the above conditions).

Repayment of advance payment for mobilization : [42]

The advance loan shall be repaid with percentage deductions from the interim payments certified by the Engineer under the Contract. Deductions shall commence in the next Interim Payment Certificate following that in which the total of all such payments to the Contractor has reached not less than 15 percent of the Contract Price or ——[31]months from the date of payment of first installment of advance, whichever period concludes earlier, and shall be made at the rate of 7.5% percent of the amounts of all Interim Payment Certificates until such time as the loan has been repaid, always provided that the loan shall be completely repaid prior to the expiry of the original time for completion pursuant to Clauses 17 and 26.

[32]The date by which -as-built□[33] drawings (in scale ...[34]) in 2 sets are required is within 30 days of issue of certificate of completion of Whole or Section of the Work as the case may be. [48]

[35]The date by which Operating and Maintenance Manuals are required is within 30 days of issue of certificate of completion of Whole or Section of the Work as the case may be. [48]

Theamounttobewithheldforfailingtosupply-asbuilt□drawings orsupplyof Operation and Maintenance Manuals by the date required is Rs.1,50,000/-
(The amount should be sufficient to get the completion drawings or Operating and Maintenance Manuals prepared by alternative agency in case the contractor fails to submit.) [48]

The following events shall also be fundamental breach of the contract : [49.2]

1. The contractor has contravened Sub-clause 7.1 and Clause 9 of CC.

The percentage to apply to the value of the work not completed representing the Employer's [50.1]

Additional cost for completing the Works shall be 30 percent (30%) .
(Change if need be. It should be sufficient to get the balance of works completed by alternative agency.)

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[31] To be filled up by the Employer before issue of the tender document; say „Three or four months□
[32] Score out which ever is not applicable.
[33] Completion drawings
[34] Specify an appropriate scale
[35] Score out which ever is not applicable.

SECTION 7: SPECIFICATIONS

1 Preamble

This section contains the specifications for proposed work and shall be read in conjunction with the various other sections forming the Contract namely Notification Inviting Applications, Instructions to Tenderers, General Conditions, Special Conditions, Bill of Quantities, Drawings and other related documents mentioned in this Tender Document together with any Addendum issued thereto.

2. General Specifications

2.1 This shall comprise with the Specification of MORTH specifications for Road and Bridge Works (most recent Revision) published by Indian Roads Congress, New Delhi latest reprinted version and shall be deemed to be bound into this document.

3. Specifications for materials, plant and machinery

3.1 Material

All materials to be provided by the Contractors shall be in conformity to the specifications laid down in the Contract and the Contractor shall if required by the Engineer-in-Charge furnish proof about their suitability and fitness to the entire satisfaction of the Engineer-in-charge.

3.2 Storage of Materials

All materials brought and kept at site of work by the Contractor or by his orders for the purpose of forming part of the works are to be considered to be the property of the office of ... and the same shall not to be removed or taken away by the Contractor or any other person without the permission of the Engineer-in-Charge. But the Engineer-in-Charge shall not be responsible for any loss or damage which may occur to or in respect of any such work or materials either by the same being lost or stolen or damaged by weather or otherwise including natural calamities (flood, earthquake, rains, riots, fire, etc.).

i. Materials required for the works shall be stored by the Contractor only at places, in standard profiles and in the manner as approved by the Engineer-in-Charge. Storage and safe custody of all materials shall be the sole responsibility of the Contractor. Special care should be taken as per relevant specification for storage of bitumen etc.

ii. The Contractors shall construct suitable go-down at the site of work for storing the material safe against damage due to sun, rain, dampness, fire, theft etc. He shall also employ necessary security measures for the purpose and no extra claim whatsoever shall be entertained on this account.

iii. From commencement till completion, all materials and works shall be under the safe custody of Contractor. The Contractor is solely responsible for and to make good all injuries, damages and repairs accrued to or rendered necessary to the same by fire, storm, rain, traffic or other causes and to hold the Engineer-in-Charge indemnified from any claim for injuries to person or for structural damage to property occurring from only neglect, default, want of proper care or misconduct on the part of the Contractor.

iv. The Contractor shall produce samples of all materials to be procured by him sufficiently in advance to obtain approval of the Engineer-in-Charge. Subsequently the materials to be

Contractor

Executive Engineer

used in the actual exe
approved. In case of
rejected materials sha
Engineer-in-Charge
Contractor.

3.3 Quality control and T

i. The Contractor at
carryout tests such
content in sand, tes
be required to pr
standard sieves, th
digital contact the
gauge, three meter
or wedge scale,
whenever require
specification. Sir
including earth w

ii. Materials includi
works such as co

iii. All the necessa
Contractor or i
samples shall b
specifications c
The Contractor
facilities as the
required numbe
in the Contract

iv. The decision
of any of the
notwithstandi

v. The Contract
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Contractor